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U. S. Department of Agriculture - Forest Service  
CENTRAL STATES FOREST EXPERIMENT STATION  
In Cooperation With  
Purdue University Agricultural Experiment Station  
DEPARTMENT OF FORESTRY

Technical Note 51.

December 1, 1941

VOLUME TABLE  
for  
BLACK MAPLE AND SUGAR MAPLE  
(*Acer nigrum* and *Acer saccharum*)  
Marshall County, Indiana

Merchantable Stem to a Variable Top Diameter							INTERNATIONAL Rule ( $\frac{3}{4}$ " Kerf)	
Diameter breast high outside bark (inches)	Gross volume of stem in 12.3-foot logs to merchantable height						Top d.i.b. at merc hantable limit	Basis in trees
	1	2	3	4	5	6		
	log	logs	logs	logs	logs	logs		
	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Bd.ft.	Inches	Number
10	26	52	77	100			7.4	2
11	32	63	95	126			7.9	3
12	38	76	114	152			8.4	5
13	45	90	135	180			8.9	4
14	53	106	158	211			9.4	11
15	62	122	184	244	306		9.9	10
16	71	141	211	280	350		10.4	13
17	80	160	240	319	399		10.8	12
18	91	181	271	361	451		11.2	5
19		202	304	406	506		11.5	8
20		227	340	452	565		11.8	7
21		252	377	502	627		12.2	4
22		278	416	555	692		12.4	8
23		306	453	610	760		12.7	2
24		335	501	668	834		13.0	-
25		366	547	728	910	1091	13.3	-
26		397	596	792	989	1186	13.6	2
Basis in trees-- number	-	13	44	32	6	1	--	96

Table based on measurements of wind-thrown timber in stands on good sites in which the two species occurred in mixture, totaling 59 black maples and 37 sugar maples. (Before the two sets of data for the two species were combined, they were tested for significant differences between the regressions. No such differences were found.) Data taken by representatives of the two stations. Measurements taken at variable log lengths above 1.5- to 3.0-foot stump heights and plotted on USFS Form 558-A. Trees scaled in 12-foot logs and additional shorter top logs; top sections less than 8 feet long scaled as fractions of an 8-foot log. Table prepared in 1941 by the equation method. Coefficient of multiple correlation (R) = .985. Band of standard error of estimate, 90.4 to 110.8 percent. Block shows limits of basic data.

In using the table the total estimated gross volume of single black and sugar maple trees or stands should be corrected for cull (including defect, sweep, crook, shake, etc.) by a percentage reduction. This percentage should be determined locally through observing the cull elements and through local experience of millmen as regards losses from rot, shake, etc., in utilizing this species.

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